

Amendments to the Claims:

Claims 1, 10 to 12, 21 to 23, 25 to 28, 30, 32 and 33 are cancelled and claims 2 to 6, 24 and 29 are amended as set forth hereinafter.

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Cancelled).
2. (Currently Amended) The optical arrangement of ~~claim 1~~ claim 4, wherein said single-axis, double-refracting crystalline material of said lens is  $\text{MgF}_2$ .
3. (Currently Amended) The optical arrangement of ~~claim 1~~ claim 4, wherein said plane is a pupillary plane.
4. (Currently Amended) ~~The optical arrangement of claim 1,~~  
~~wherein~~ An optical arrangement disposed with respect to an  
optical axis, the optical arrangement comprising:  
a plane perpendicular to said optical axis;  
5 a light source for generating a light beam along said  
optical axis and the light of said light beam in said plane being  
polarized either tangentially to said optical axis or radially  
with respect to said optical axis and the light of said light

- beam having a wavelength of 157 nm or 193 nm;
- 10        at least one lens mounted in or next to said plane;  
         said lens being made of single-axis, double-refracting  
         crystalline material defining an optical crystal axis;  
         said optical crystal axis being aligned parallel to said  
         optical axis of said optical arrangement; and,
- 15        said lens ~~takes~~ taking up said light beam with a numerical  
aperture of up to 0.1.

5. (Currently Amended) The optical arrangement of ~~claim 1~~  
claim 4, wherein said light source is a laser and said laser  
includes a resonator for coupling out tangentially or radially  
polarized light.

6. (Currently Amended) The optical arrangement of ~~claim 1~~  
claim 4, wherein said lens is a first lens and said material is a  
first material; and, said optical arrangement further comprising  
at least a second lens made of a second material different than  
5        that of said first material.

7. (Previously Presented) The optical arrangement of claim 6,  
wherein said second material is crystal.

8. (Previously Presented) The optical arrangement of claim 7,  
wherein said crystal is  $\text{CaF}_2$ .

9. (Previously Presented) The optical arrangement of claim 7,  
wherein said crystal is  $\text{BaF}_2$ .

Claims 10 to 12 (Cancelled).

13. (Previously Presented) An optical arrangement disposed with respect to an optical axis, the optical arrangement comprising:

a plane perpendicular to said optical axis;

5 a light source for generating a light beam along said optical axis and the light of said light beam in said plane being polarized either tangentially to said optical axis or radially with respect to said optical axis;

at least one lens mounted in or next to said plane;

10 said lens being made of single-axis, double-refracting crystalline material defining an optical crystal axis;

said optical crystal axis being aligned parallel to said optical axis of said optical arrangement; and,

said lens taking up said light beam with a numerical aperture of up to 0.1.

14. (Previously Presented) The optical arrangement of claim 13, wherein said single-axis, double-refracting crystalline material of said lens is  $\text{MgF}_2$ .

15. (Previously Presented) The optical arrangement of claim 13, wherein said plane is a pupillary plane.

16. (Previously Presented) The optical arrangement of claim 13, wherein said light source is a laser and said laser includes a resonator for coupling out tangentially or radially polarized light.

17. (Previously Presented) The optical arrangement of claim 13,  
wherein said lens is a first lens and said material is a first  
material; and, said optical arrangement further comprising at  
least a second lens made of a second material different than that  
5 of said first material.

18. (Previously Presented) The optical arrangement of claim 17,  
wherein said second material is crystal.

19. (Previously Presented) The optical arrangement of claim 18,  
wherein said crystal is  $\text{CaF}_2$ .

20. (Previously Presented) The optical arrangement of claim 18,  
wherein said crystal is  $\text{BaF}_2$ .

Claims 21 to 23 (Cancelled).

24. (Currently Amended) ~~The optical arrangement of claim 21,~~  
~~wherein~~ An optical arrangement disposed with respect to an  
optical axis, the optical arrangement comprising:  
a plane perpendicular to said optical axis;  
5 a light source for generating a light beam along said  
optical axis and the light of said light beam in said plane being  
polarized either tangentially to said optical axis or radially  
with respect to said optical axis;  
at least one lens mounted in or next to said plane;  
10 said lens being made of single-axis, double-refracting  
crystalline material defining an optical crystal axis;

said optical crystal axis being aligned parallel to said optical axis of said optical arrangement;

15 said lens being a first lens and said material being a first material; and, said optical arrangement further comprising at least a second lens made of a second material different than that of said first material;

said second material being crystal;

said crystal being  $\text{CaF}_2$ ; and,

20 said lens ~~takes~~ taking up said light beam with a numerical aperture of up to 0.1.

Claims 25 to 28 (Cancelled).

29. (Currently Amended) ~~The optical arrangement of claim 26,~~  
wherein An optical arrangement disposed with respect to an optical axis, the optical arrangement comprising:

a plane perpendicular to said optical axis;

a light source for generating a light beam along said optical axis and the light of said light beam in said plane being polarized either tangentially to said optical axis or radially with respect to said optical axis;

at least one lens mounted in or next to said plane;

said lens being made of single-axis, double-refracting crystalline material defining an optical crystal axis;

said optical crystal axis being aligned parallel to said optical axis of said optical arrangement;

said lens being a first lens and said material being a first material; and, said optical arrangement further comprising at

least a second lens made of a second material different than that of said first material;

said second material being crystal;

said crystal being BaF<sub>2</sub>; and,

said lens ~~takes~~ taking up said light beam with a numerical aperture of up to 0.1.

Claim 30 (Cancelled).

31. (Previously Presented) A microlithographic projection exposure system defining an optical axis, said system comprising:

a UV light source for generating a light beam along said optical axis;

5 an illumination system arranged on said optical axis downstream of said UV light source for receiving and processing the light beam of said UV light source;

a projection objective arranged downstream of said illumination system; and,

10 one of said illumination system and said projection objective including an optical arrangement; and, said optical arrangement including:

a plane perpendicular to said optical axis;

15 the light of said light beam in said plane being in a polarized state either tangentially to said optical axis or radially with respect to said optical axis;

at least one lens mounted in or next to said plane;

said lens being made of single-axis, double-refracting crystalline material defining an optical crystal axis;

20           said optical crystal axis being aligned parallel to said  
optical axis of said optical arrangement; and,

          said lens taking up said light beam with a numerical  
aperture of up to 0.1.

Claims 32 and 33 (Cancelled).